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EXAMINER

FLETCHER III, WILLIAM P

ART UNIT PAPER NUMBER

1762

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/747,731

Applicant(s)

YAMAZAKI ET AL.

Examiner

William P. Fletcher III

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-22, 37-40, 43-45, 48, 49 and 53-176 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-22, 37-40, 43-45, 48, 49 and 53-176 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/2/06 & 5/25/06.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Receipt is acknowledged of applicant's amendment and remarks, filed May 25, 2006.
2. Claims 20-22, 37-40, 43-45, 48, 49, and 53-176 are now pending.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on May 2, 2006, was filed after the mailing date of the non-final Office action on February 22, 2006. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.
4. The information disclosure statement (IDS) submitted on May 25, 2006, was filed after the mailing date of the non-final Office action on February 22, 2006. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Response to Arguments

5. Applicant's arguments filed May 25, 2006 have been fully considered but they are not persuasive.

A. Applicant's discussion of the purported advantages of the instant invention, beginning at the bottom of page 33 of the remarks, is noted and understood. The examiner thanks applicant for the detailed explanation of this aspect of the technology during the interview conducted March 20, 2006. Applicant concludes this section of the remarks by arguing:

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None of the cited references, either individually or combined, disclose all of these claimed features, and none realize or recognize the above advantages and uniformity of the film resulting from the claimed invention. Therefore, since there is no recognition of these advantages, one skilled in the art would not combine these references to realize these advantages and arrive at the claimed invention.

The examiner disagrees:

i. None of the features/advantages referred to by applicant are actually claimed. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

ii. As long as some motivation or suggestion to combine the references is provided by the prior art taken as a whole, the law does not require that the references be combined for the reasons contemplated by the inventor. See *In re Beattie*, 974 F.2d at 1312. In other words, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

iii. Finally, there is no evidence of record that the combination of references, which otherwise teach all of applicant's claimed process steps, does not result in a product possessing these features/advantages.

B. At the first full paragraph on page 35 of the remarks, applicant argues:

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The nonobviousness of the claimed invention is evidenced by the fact that others did not begin to use ideas similar to the present invention until after Applicant's invention. For example, the Examiner has not found a single reference showing the claimed invention. ...If the present invention was obvious, these ideas would have surfaced prior to Applicant's invention.

The examiner disagrees:

i. It is well-settled that the lack of an anticipatory reference does not support patentability where the claimed invention would have otherwise been obvious to one of ordinary skill in the art. 35 USC 103 authorizes a rejection where, to meet the claim, it is necessary to modify a single reference or to combine it with one or more other references. See MPEP 706.02(j).

ii. Further, mere attorney argument is insufficient to establish that an invention satisfies a long-felt need in the art. See MPEP 710.06(c)(II).

C. With respect to the combination of references set forth in the prior Office action, applicant concludes:

[T]here is nothing in Arai or Grothe to teach one skilled in the art as to how one could allegedly incorporate the device from Grothe in the device in Arai. Accordingly, in light of the above teachings in Grothe which appear to teach away from the subject matter of the present invention, and the lack of teachings in Grothe relevant to the subject matter of Arai, it is respectfully submitted that there would

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have been no motivation for one skilled in the art to combine Arai and Grothe to try to arrive at the claimed invention, except when using the claimed invention as a guide.

The examiner disagrees.

i. With respect to the “incorporation” referred to by applicant, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

ii. As noted above, 35 USC 103 authorizes a rejection where, to meet the claim, it is necessary to modify a single reference or to combine it with one or more other references. See MPEP 706.02(j). That a primary reference in an obviousness rejection fails to teach certain features of the claimed invention is to be expected and is the reason why the examiner has rejected the claims under 35 USC 103 instead of 35 USC 102. The mere fact that a primary reference fails to explicitly recite certain features does not rise to the level of a teaching away, as the silence of the reference with respect to a certain feature, show to be obvious by combination with one or more other references, does not, in and of itself, criticize, discredit, or otherwise discourage the combination. See *In re Fulton et al.*, 04-1267 (CAFC 2004).

iii. With respect to motivation to combine, the examiner has clearly set forth motivation for each and every combination of record. Applicant has not directly addressed such motivational statements. Rather, applicant has pointed to the individual

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deficiencies of each reference in the combination, taken alone, and fails to address what the references, when taken as a whole, would have suggested to one of ordinary skill in the art as embodied by the examiner's motivational statements. See *In re Conrad*, 169 USPQ 170 (CCPA 1971) and *In re Siebentritt*, 152 USPQ 618 (CCPA 1967). Again, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

iv. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

D. With respect to the inclusion of Monk in the combination, applicant argues:

...Monk discloses a face-up method in which film formation is performed with the wafer surface, onto which a film is being formed, facing upward. See e.g., Fig. 4 in Monk. Monk does not disclose or suggest a face-down method. Further, Monk does not disclose a display device or method for forming a display device. Therefore, there would have been no motivation for one skilled in the art to combine Arai and Monk to try to arrive at the claimed invention. Further, no explanation is

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provided for how one skilled in the art would incorporate Monk into Arai.

The examiner disagrees:

i. A face-down method is not recited in the claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

ii. The examiner acknowledges that Monk does not specifically teach a display device. Nevertheless, Arai teaches this feature and it is the combination of Arai with the other cited references that constitutes the rejection.

iii. Finally, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

E. Since the arguments at pages 33-37 of the response, traversing the rejections of claims 20-22, 44, 45, 48, 63, 70, and 74, in particular, are essentially repeated in the traversal of all other previously presented claims, the above responses are sufficient to show that all of the other arguments presented in the remarks are unpersuasive as well.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 20–22, 44, 45, 48, 63, 70, 74, and 156 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (US 5,817,366 A) in view of Grothe et al. (US 3,391,490 A), Monk (US 4,187,801 A), and Nagayama et al. (US 5,701,055 A).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

With respect to new claim 156, a passive matrix display would have been obvious as explained in prior Office actions.

9. Claims 37, 43, 48, 53, 64, 75, and 157 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (US 5,817,366 A), in view of Bennett (US 2,435,997 A), Grothe et al. (US 3,931,490 A), and Nagayama et al. (US 5,701,055 A).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

With respect to new claim 157, a passive matrix display would have been obvious as explained in prior Office actions.

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10. Claims 38, 48, 56, 65, 76, 153, and 158 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (US 5,817,366 A), in view of Bennett (US 2,435,997 A), Grothe et al. (US 3,931,490 A), Nagayama et al. (US 5,701,055 A), and Monk (US 4,187,801 A).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

With respect to new claim 153, the claimed relative movement would have been obvious as explained in prior Office actions.

With respect to new claim 158, a passive matrix display would have been obvious as explained in prior Office actions.

11. Claim 39, 48, 53, 57, 66, 77, and 159 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Arai et al. (US 5,817,366 A), in view of Nagayama et al. (US 5,701,055 A), Feuerstein et al. (US 4,627,989 A), Bennett (US 2,435,997 A), and Yamamoto et al. (JP 11-61386 A, US 6,179,923 B1 provided as English-language equivalent).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

With respect to new claim 159, a passive matrix display would have been obvious as explained in prior Office actions.

12. Claim 40, 48, 58, 67, 78, 154, and 160 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Arai et al. (US 5,817,366 A), in view of Nagayama et al. (US 5,701,055 A), Feuerstein et al. (US 4,627,989 A), Bennett (US 2,435,997 A), and Yamamoto et al. (JP 11-61386 A, US 6,179,923 B1 provided as English-language equivalent) or, in the alternative, over Arai et al., in view of Nagayama et al. (US 5,701,055 A), Feuerstein et al.,

Bennett, Monk (US 4,187,801 A), and Yamamoto et al. (JP 11-61386 A, US 6,179,923 B1 provided as English-language equivalent).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

With respect to new claim 154, the claimed relative movement would have been obvious as explained in prior Office actions.

With respect to new claim 160, a passive matrix display would have been obvious as explained in prior Office actions.

13. Claim 49 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Arai et al. (US 5,817,366 A) in view of Grothe et al. (US 3,391,490 A), Monk (US 4,187,801 A), and Nagayama et al. (US 5,701,055 A) as applied to claim 20 above, further in view of Spitzer et al. (US 5,258,325 A).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

14. Claims 54, 68, 71, 79, and 161 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (US 5,817,366 A), in view of Nagayama et al. (US 5,701,055 A), Bennett (US 2,435,997 A), Grothe et al. (US 3,931,490 A), and Yamamoto et al. (JP 11-61386 A, US 6,179,923 B1 provided as English-language equivalent).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

With respect to new claim 161, a passive matrix display would have been obvious as explained in prior Office actions.

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15. Claims 55, 69, 72, 80, 155, and 162 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (US 5,817,366 A), in view of Nagayama et al. (US 5,701,055 A), Bennett (US 2,435,997 A), Grothe et al. (US 3,931,490 A), Monk (US 4,187,801 A), and Yamamoto et al. (JP 11-61386 A, US 6,179,923 B1 provided as English-language equivalent).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

With respect to new claim 155, the claimed relative movement would have been obvious as explained in prior Office actions.

With respect to new claim 162, a passive matrix display would have been obvious as explained in prior Office actions.

16. Claim 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (US 5,817,366 A), in view of Nagayama et al. (US 5,701,055 A), Bennett (US 2,435,997 A) and Grothe et al. (US 3,931,490 A), as applied to claim 37 above, further in view of Spitzer et al. (US 5,258,325 A).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

17. Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (US 5,817,366 A), in view of Nagayama et al. (US 5,701,055 A), Bennett (US 2,435,997 A), Grothe et al. (US 3,931,490 A), and Monk (US 4,187,801 A), as applied to claim 38 above, further in view of Spitzer et al. (US 5,258,325 A).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

18. Claim 61 rejected under 35 U.S.C. § 103(a) as being unpatentable over Arai et al. (US 5,817,366 A), in view of Nagayama et al. (US 5,071,055 A), Feuerstein et al. (US 4,627,989 A), Bennett (US 2,435,997 A), and Yamamoto et al. (JP 11-61386 A, US 6,179,923 B1 provided as English-language equivalent), as applied to claim 39 above, further in view of Spitzer et al. (US 5,258,325 A).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

19. Claim 62 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Arai et al. (US 5,817,366 A), in view of Nagayama et al. (US 5,701,055 A), Feuerstein et al. (US 4,627,989 A), Bennett (US 2,435,997 A), and Yamamoto et al. (JP 11-61386 A, US 6,179,923 B1 provided as English-language equivalent) or, in the alternative, over Arai et al., in view of Nagayama et al., Feuerstein et al., Bennett, Monk (US 4,187,801 A), and Yamamoto et al. (JP 11-61386 A, US 6,179,923 B1 provided as English-language equivalent), as applied to claim 40 above, further in view of Spitzer et al. (US 5,258,325 A).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

20. Claim 73 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (US 5,817,366 A) in view of Grothe et al. (US 3,391,490 A), Monk (US 4,187,801 A), and Nagayama et al. (US 5,701,055 A), as applied to claim 20 above, further in view of Mizutani et al. (US 6,326,726 B1).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

21. Claims 81-88, 92-100, 141-144, 163, 164, 166-168, 169-176 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (US 5,817,366 A) in view of Grothe et al. (US 3,391,490 A), Monk (US 4,187,801 A), and Nagayama et al. (US 5,701,055 A).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

With respect to new claims 141-144, these features are taught by these reference as noted in prior Office actions. See the rejection of claim 96, for example

With respect to new claims 163, 164, and 166-168 a passive matrix display would have been obvious as explained in prior Office actions.

With respect to new claims 169-176, these features are taught by or are obvious over the cited references, as explained in prior Office actions. In particular, Nagayama teaches a rectangular mask opening.

22. Claims 89-91 and 165 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (US 5,817,366 A) in view of Grothe et al. (US 3,391,490 A), Monk (US 4,187,801 A), and Nagayama et al. (US 5,701,055 A).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

With respect to new claim 165, a passive matrix display would have been obvious as explained in prior Office actions.

23. Claim 101 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (US 5,817,366 A) in view of Grothe et al. (US 3,391,490 A), Monk (US 4,187,801 A), and Nagayama et al. (US 5,701,055 A), as applied to claim 98 above, further in view of Spitzer et al. (US 5,258,325 A).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

24. Claims 102-104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (US 5,817,366 A) in view of Grothe et al. (US 3,391,490 A), Monk (US 4,187,801 A), and Nagayama et al. (US 5,701,055 A), as applied to claim 20 above, further in view of Bertelsen (US 3,110,620 A).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

25. Claims 105-107 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (US 5,817,366 A), in view of Bennett (US 2,435,997 A), Grothe et al. (US 3,931,490 A), and Nagayama et al. (US 5,701,055 A), as applied to claim 37 above, further in view of Bertelsen (US 3,110,620 A).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

26. Claims 108-110 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (US 5,817,366 A), in view of Bennett (US 2,435,997 A), Grothe et al. (US 3,931,490 A), Nagayama et al. (US 5,701,055 A), and Monk (US 4,187,801 A), as applied to claim 38 above, further in view of Bertelsen (US 3,110,620 A).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

27. Claims 111-113 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Arai et al. (US 5,817,366 A), in view of Nagayama et al. (US 5,701,055 A), Feuerstein et al. (US 4,627,989 A), Bennett (US 2,435,997 A), and Yamamoto et al. (JP 11-61386 A, US

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6,179,923 B1 provided as English-language equivalent), as applied to claim 39 above, further in view of Bertelsen (US 3,110,620 A).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

28. Claims 114-116 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Arai et al. (US 5,817,366 A), in view of Nagayama et al. (US 5,701,055 A), Feuerstein et al. (US 4,627,989 A), Bennett (US 2,435,997 A), and Yamamoto et al. (JP 11-61386 A, US 6,179,923 B1 provided as English-language equivalent) or, in the alternative, over Arai et al., in view of Nagayama et al. (US 5,701,055 A), Feuerstein et al., Bennett, Monk (US 4,187,801 A), and Yamamoto et al. (JP 11-61386 A, US 6,179,923 B1 provided as English-language equivalent), as applied to claim 340 above, further in view of Bertelsen (US 3,110,620 A).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

29. Claims 117-119 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (US 5,817,366 A), in view of Nagayama et al. (US 5,701,055 A), Bennett (US 2,435,997 A), Grothe et al. (US 3,931,490 A), and Yamamoto et al. (JP 11-61386 A, US 6,179,923 B1 provided as English-language equivalent), as applied to claim 54 above, further in view of Bertelsen (US 3,110,620 A).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

30. Claims 120-122 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (US 5,817,366 A), in view of Nagayama et al. (US 5,701,055 A), Bennett (US 2,435,997

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A), Grothe et al. (US 3,931,490 A), Monk (US 4,187,801 A), and Yamamoto et al. (JP 11-61386 A, US 6,179,923 B1 provided as English-language equivalent), as applied to claim 55 above, further in view of Bertelsen (US 3,110,620 A).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

31. Claims 123-128 and 132-138 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (US 5,817,366 A) in view of Grothe et al. (US 3,391,490 A), Monk (US 4,187,801 A), and Nagayama et al. (US 5,701,055 A), as applied to claims 81, 85, 92, 95, and 98, respectively, above, further in view of Bertelsen (US 3,110,620 A).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

32. Claims 129-131 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. (US 5,817,366 A) in view of Grothe et al. (US 3,391,490 A), Monk (US 4,187,801 A), and Nagayama et al. (US 5,701,055 A), as applied to claim 129-131 above, further in view of Bertelsen (US 3,110,620 A).

These claims are rejected for the same reasons as set forth under this heading in the prior Office action.

33. Claims 145-148 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Arai et al. (US 5,817,366 A), in view of Nagayama et al. (US 5,701,055 A), Feuerstein et al. (US 4,627,989 A), Bennett (US 2,435,997 A), and Yamamoto et al. (JP 11-61386 A, US 6,179,923 B1 provided as English-language equivalent), as applied to claim 39 above, further in view of either Noguchi et al. (US 4,596,735 A) or Martin (US 4,469,719 A).

Arai, Nagayama, Feuerstein, Bennett, and Yamamoto are cited herein again as detailed above.

None of these references teaches the claimed source-mask distance.

Both Noguchi and Martin teach that the source-mask distance is a result-effective variable effecting various properties of the deposited film.

Consequently, it would have been obvious to one of ordinary skill in the art, absent evidence of criticality, to optimize this distance by routine experimentation. See MPEP 2144.05.

34. Claims 149-152 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Arai et al. (US 5,817,366 A), in view of Nagayama et al. (US 5,701,055 A), Feuerstein et al. (US 4,627,989 A), Bennett (US 2,435,997 A), and Yamamoto et al. (JP 11-61386 A, US 6,179,923 B1 provided as English-language equivalent) or, in the alternative, over Arai et al., in view of Nagayama et al. (US 5,701,055 A), Feuerstein et al., Bennett, Monk (US 4,187,801 A), and Yamamoto et al. (JP 11-61386 A, US 6,179,923 B1 provided as English-language equivalent), as applied to claim 40 above, further in view of either Noguchi et al. (US 4,596,735 A) or Martin (US 4,469,719 A).

Arai, Nagayama, Feuerstein, Bennett, Monk, and Yamamoto are cited herein again as detailed above.

None of these references teaches the claimed source-mask distance.

Both Noguchi and Martin teach that the source-mask distance is a result-effective variable effecting various properties of the deposited film.

Consequently, it would have been obvious to one of ordinary skill in the art, absent evidence of criticality, to optimize this distance by routine experimentation. See MPEP 2144.05.

Conclusion

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35. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

36. The prompt development of clear issues in the prosecution history requires that applicant's reply to this Office action be fully responsive (MPEP § 714.02). When filing an amendment, applicant should specifically point out the support for any amendment made to the disclosure, including new or amended claims (MPEP §§ 714.02 & 2163). A fully responsive reply to this Office action, if it includes new or amended claims, must therefore include an explicit citation (i.e., page number and line number) of that/those portion(s) of the original disclosure which applicant contends support(s) the new or amended limitation(s).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Fletcher III whose telephone number is (571) 272-1419. The examiner can normally be reached on Monday through Friday, 0900h-1700h.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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Patent Examiner (FSA), USPTO
Art Unit 1762

Fredericksburg, VA
August 6, 2006